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DIVISION 2 : PHYSICAL MEASUREMENT OF LIGHT AND RADIATION

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## CIE Warsaw Session Program Summary

Date / time			Session Item	Social Event
June	23	Wednesday	Registration	Get-together Party (19:00 at WUT)
June	24	9:00-10:55 11:15-14:30 14:30-17:00	<b>Opening / invited papers</b> (Kossakowski, Robertson) Sessions of Div. 1, 3, 4 Workshops - D3, D4	Cultural Programme Welcome Cocktail (19:00 at National Theater)
June	25	9:00- 9:45 10:00- 10:55 11:00- 12:15 13:30- 14:30 14:30- 17:00	Invited paper (McGowan) <b>Presented papers Div.2, 3, 5</b> <b>Presented poseters Div.2, 3, 5</b> <b>Posters</b> <b>Workshops - D2/D1</b> <b>(Photometry of flashing lights),</b> D3	Official Banquet (20:00)
June	26	9:00- 9:45 10:00- 10:55 11:00- 12:15 14:30- 17:00 17:00	Invited paper (Narisada) Presented papers Div.1, 3, 6 Presented poseters Div.1, 3, 6 Workshops - D1, D? Closing	Garden Party (20:00)
June	27	Sunday		Warsaw City Tour
June	28	Monday	<b>Division and TC meetings</b>	
June	29	Tuesday	<b>Division and TC meetings</b>	
June	30	Wednesday	<b>Division and TC meetings</b>	Farewell Cocktail (19:00)

**Bold:** Division 2 related



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## Division 2 papers in Warsaw Session

### Presented Papers

2C-PA1: 18	Ohno, Y.	Detector-based integrating sphere photometry
2C-PA2: 155	Verrill, J.F., Clarke, P.J., Hanson, A.R.	The estimation and reduction of uncertainties in surface colour measurements

### Presented Posters

2C-PP1: 10	Clare, J.F.	Analytic approaches to the calculation of irradiance in integrating spheres
2C-PP2: 17	Rennilson, J.J.	Measurement of retroreflective traffic control devices; A new CIE Technical Report using the driving scenario
2C-PP3: 20	Johnson, N.L.	Accuracy in measuring the daytime color of retroreflective materials
2C-PP4: 23	Budzinski, M., Denner, B.F., Hengstberger, F., Monard, L.A.G.	Realization of the candela and the lumen at the National Metrology Laboratory (NML) of the CSIR during 1997/98
2C-PP5: 119	Iacomussi, P., Rossi, G., Soardo, P.	Measurements and simulation programmes for lighting of works of art
2C-PP6:	Brida, G., Castelletto, S., Novero, C., Rastello, M.L.	Metrology of photon quantities
2C-PP7: 135	Bastie, J., Katnah, A., Coutin, J.-M.	Realisation of the candela based on a cryogenic radiometer
2C-PP8: 138	Marx, P.	Neue Photometer zur korrekten Messung der photometrischen Größen Lichtstärke, Lichtstrom, Beleuchtungsstärke und Leuchtdichte von gepulsten Na-Xe-Hochdrucklampen mit extrem hohem Crestfaktor
2C-PP9: 154	Goodman, T., Pearce, N., West, S.	The new NPL goniophotometer

## Display Posters

1	Embrechts, J.J.	Progress in the modelization of light reflection for lighting calculations
110	Mank, A., Mank, T.B.	Fixing accuracy methodology for the radiation meters
111	Fryc, I.	The influence of the diffusing element of the illuminance meter upon the errors of the spectral correction
113	Dybczynski, W.	Uniformity of photoelectric converter sensitivity
117	Iacomussi, P., Rossi, G., Sarotto, M., Soardo, P.	Applications of a modified radiosity algorithm for stray light evaluation of a photometric laboratory
121	Sibilio, S., Bellia, L., Cesarano, A., Minichiello, F.	A CCD photometer for lighting research and design
130	Coutin, J.-M., Touayar, Q., Bastie, J.	The using conditions of the BNM-INM cryogenic radiometer as the basis for the French optical radiation measurement scales
142	Zoch, A.S.	Total rational partitive color mixture continua and triangles
149	Rancic, P.D.	Characterization of the sphere surface illumination by the law of luminous flux conservation
152	Goodman, T., Pearce, N.	Spectral total flux measurements in the UV
153	Goodman, T., Harrison, N., Lambe, R., Page, A.	Improved photometric and spectroradiometric standard lamps
159	Hou, M., Ye, G., Zhao, T.	The fluorescent measurement of the high polymer material and the scheme of the instrument
226	Kohns, P.	LED testing in product lines

The above information is an extract from the CIE 24<sup>th</sup> Session Program booklet, which is also posted at website: <http://www.ee.pw.edu.pl/cie99/>

The abstract of the Workshop on Photometry of Flashing Lights is posed at  
<http://nml.csir.co.za/~cie2/meetings/Workshop99.html>



COMMISSION INTERNATIONALE DE L'ÉCLAIRAGE  
INTERNATIONAL COMMISSION ON ILLUMINATION  
INTERNATIONALE BELEUCHTUNGSKOMMISSION

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## DIVISION 2 : PHYSICAL MEASUREMENT OF LIGHT AND RADIATION

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### Division 2 TC meeting Schedule

(Subject to minor changes. Please check the final schedules at Conference site.)

#### Monday, June 28

Room 1

13:30 – 15:30 TC2-32 (Hodson)  
15:30 – 15:45 < break >  
15:45 – 17:45 TC2-36 (Rennilson)

Room 2

10:00 – 12:00 TC2-40 (Rattunde)  
12:00 – 13:30 <lunch break>  
13:30 – 15:30 TC2-43 (Sauter)  
15:30 – 15:45 <break>  
15:45 – 17:45 TC2-46 (Scarangello)

#### Tuesday, June 29

Room 1

9:00 – 12:00 TC2-39 (Rich)

Room 2

8:30 – 10:30 TC2-45 (Muray)  
10:30 – 10:45 <coffee break>  
10:45 – 12:00 TC2-49 (Ohno)  
12:00 – 13:30 <lunch break>  
13:30 – 15:30 TC2-47 (Xu)  
15:30 – 15:45 <break>  
15:45 – 17:45 TC2-48 (Eppeldauer)

#### Wednesday, June 30

Room 1

8:30 – 12:00 Division 2 meeting  
12:00 – 13:30 <lunch break>  
13:30 – 17:00 Division 2 meeting

\* Rooms 1 and 2 are tentative designations. Room names to be posted at Conference site.

# Divisions 1,2,4,6,8 TC Meetings Schedules

		28 June (Mon)		29 June (Tue)		30 June (Wed)	
		AM	PM	AM	PM	AM	PM
<b>DIV. 1</b>	<b>Room 1</b>	TC1-42	D1 Meeting; TC1-48; TC1-53	D1 Meeting		TC1-47	TC1-27; TC1-52
	<b>Room 2</b>					TC1-38	TC1-37
<b>DIV. 2</b>	<b>Room 1</b>		TC2-32; TC2-36	TC2-39		D2 Meeting	
	<b>Room 2</b>	TC2-40	TC2-43; TC2-46	TC2-45; TC2-49	TC2-47; TC2-48		
<b>DIV. 4</b>	<b>Room 1</b>	D4 Opening; TC4-31	TC4-35	D4 Meeting	D4 Meeting; TC4-24	D4 Meeting; unfinished TCs	TC 4-26
	<b>Room 2</b>	TC4-40	TC4-38		TC4-32	unfinished TCs	unfinished TCs
	<b>Room 3</b>	TC4-41; TC4-37					
<b>DIV. 6</b>	<b>Room 1</b>	D6 Meeting	D6 Meeting; TC6-47	TC6-47			
	<b>Room 2</b>		TC6-36				
<b>DIV. 8</b>	<b>Room 1</b>	D8 Meeting					

Full titles of the TCs listed:

## Division 1

TC1-27 Specification of Colour Appearance for Reflective Media and Self-Luminous Display Comparison (P. Alessi)

TC1-37 Supplementary System of Photometry (K. Sagawa)

TC1-38 Compatibility of Tabular Data for Computational Purposes (C. S. McCamy)

TC1-42 Colour Appearance in Peripheral Vision (M. Takase)

TC1-47 Hue and Lightness Correction to Industrial Colour Difference Evaluation (D. H. Alman)

TC1-48 Revision of CIE Document 15.2 Colorimetry (J. Schanda)

TC1-52 Chromatic Adaptation Transform (R. Luo)

TC1-53 A Standard Method of Assessing the Quality of Daylight Simulators (C. S. McCamy)

## Division 2

TC2-32 Measuring Retroreflectance of Wet Horizontal Road Markings (N. Hodson)

TC2-36 Retroreflection: Definition and Measurement (J. Rennilson)

TC2-39 Geometric Tolerances for Colorimetry (D. Rich)

TC2-40 Characterizing the Performance of Illuminance and Luminance Meters (R. Rattunde)

TC2-43 Determination of Measurement Uncertainties in Photometry (G. Sauter)

TC2-45 Measurement of LEDs - Revision of CIE 127 (K. Muray)

TC2-46 CIE/ISO standards on LED intensity measurements (J. Scarangello)

TC2-47 Characterization and Calibration Methods of UV Radiometers (G. Xu)

TC2-48 Spectral responsivity measurement of detectors, radiometers, and photometers (G. Eppeldauer)

TC2-49 Photometry of Flashing Light (Y. Ohno)

**Division 4**

TC4-24 Calculation and measurement of tunnel lighting quality criteria (W. Riemenschneider)  
TC4-26 Systems for measurement of photometric quantities of road lighting installations (G. Rossi)

TC4-31 Colour vision standards for transport (B.L. Cole)

TC4-32 Surface colours for traffic signs (P.L. Walraven)

TC4-35 Tunnellingighting (W. Riemenschneider)

TC4-37 Roadway lighting in developing countries (S.R. Chowdhury)

TC4-38 Visibility requirements for roadwaysigns (T. Schnell)

TC4-40 Requirements for retroreflective traffic signs (J. Rennilson)

TC4-41 Crime and Lighting (K. Painter)

**Division 6**

TC6-47 Photobiological Lamp Safety Standard (Rolf Bergman)

TC6-36 UV Protective Materials Used in Shading (Natasha van Tonder)

**Division 8**

- The above information on the TC meetings is posted at CIE D2 webpage:  
[http://nml.csir.co.za/~cie2/meetings/TC\\_meet\\_D12468.html](http://nml.csir.co.za/~cie2/meetings/TC_meet_D12468.html)

## LIST of Division 2 TCs

June 7, 1999

<b>Technical Committee</b>	<b>AD</b>	<b>Chair</b>
TC2-04 Secondary standard sources	G	John R. Moore
TC2-14 Measurement of Reflectance and Transmittance, Including Turbid Media	J	Pietro Polato
TC2-16 Characterization of the performance of tristimulus colorimeters	G	Maria Luisa Rastello
TC2-17 Recommendation for integrated irradiance and spectral distribution of simulated solar radiation	G	Dieter Kockott
TC2-19 Measurement of the Spectral Coefficient of Retroreflection	J	Norbert Johnson
TC2-23 Photometry of Street-Lighting Luminaires	V	Guy Vandermeersch
TC2-24 Users guide for the selection of illuminance and luminance meters	G	K. Ganesha
TC2-25 Calibration Methods and Photoluminescent Standard for Total Radiance Factor Measurement	J	Joanne C. Zwinkels
TC2-28 Methods of characterizing spectrophotometers	G	John F. Verrill
TC2-29 Measurement of detector linearity	G	Teresa M. Goodman
TC2-30 Array radiometry	J	James M. Palmer
TC2-32 Measuring Retroreflectance of Wet Horizontal Road Markings	J	Neil A. Hodson
TC2-35 CIE Standard for V(I) and V'(I)	J	Klaus D. Mielenz
TC2-36 Retroreflection: Definition and Measurement (Revision of CIE Publication 54, Liaison with CEN/226)	J	Justin Rennilson
TC2-37 Photometry Using Detectors as Transfer Standards	J	Yoshi Ohno
TC2-39 Geometric Tolerances for Colorimetry	J	Danny C. Rich
TC2-40 Characterizing the Performance of Illuminance and Luminance Meters	G	Reiner Rattunde
TC2-41 Industrial Photometry in Developing Countries	G	Basudev Bhattacharya
TC2-42 The Colorimetry of Visual Displays	G	Andrew R. Hanson
TC2-43 Determination of measurement uncertainties in photometry	G	Georg Sauter
TC2-44 Vocabulary Matters	V	John R. Moore
TC2-45 Measurement of LEDs - Revision of CIE 127		Kathleen Muray
TC2-46 CIE/ISO standards on LED intensity measurements		John Scarangello
TC2-47 Characterization and Calibration Methods of UV Radiometers		Gan Xu
TC2-48 Spectral responsivity measurement of detectors, radiometers, and photometers.		George Eppeldauer
TC2-49 Photometry of Flashing Light		Yoshi Ohno

<b>Technical Committees producing ISO/CIE standards</b>
TC2-35 CIE Standard for V( ) and V'( )
TC2-36 Retroreflection: Definition and Measurement (Revision of CIE Publication 54, Liaison with CEN/226)
TC2-40 Characterizing the Performance of Illuminance and Luminance Meters
TC2-46 CIE/ISO standards on LED intensity measurements

## LIST of Reporters

<b>Reportership</b>	<b>AD</b>	<b>Reporter</b>	
R2-05 Visual Gloss	G	Julie	Taylor
R2-06 Standardization of Measuring Geometry for the Colorimetry of Metallic Coatings	J	Calvin S.	McCamy
R2-09 Absolute Cryogenic Radiometers	J	Albert C.	Parr
R2-17 Aviation Photometry	G	Yoshi	Ohno
R2-18 OIML Matters	H	Georg	Sauter
R2-21 Use of detectors as absolute transfer standards for spectroradiometry	G	Nigel P.	Fox
R2-22 Implementation of SI Photometric Units	V	Rainer	Köhler

## LIST of Liaisons

<b>Liaison Organization</b>	<b>Liaison Officer</b>
CCPR - Consultative Committee of Photometry and Radiometry	Rainer Köhler
IEC TC 34: Lamps and rel. equipm.	G. Vandermeersch
IEC TC100/PT61966 Audio, Video and Multimedia Systems and Equipment	Yoshi Ohno
IEC/ISO JTAG2: Joint Technical Advisory Group 2	
ISO TC6 Paper, board & pulps	Joanne Zwinkels
ISO TC160/SC2/WG 2:Glass in buildings, Light & energy trans.	Jack Hsia
ISO TC 180/SC 1: Solar energy/Climate - Measurement and data	Dieter Kockott

## LIST of Country Members

June 7,1999

Country	Last name	First name
ARGENTINA	Cogno	Lic. Adrian J.
AUSTRALIA	Gardner	Jim
AUSTRIA	Matus	Michael
BELGIUM	Vandermeersch	Guy
BRAZIL	Moscati	G.
BULGARIA	Konstantinova	V
CANADA	Zwinkels	Joanne C.
CHINA	Ye	Guan-Rong
CROATIA	Zeljko	M.
DENMARK	Larsen	Lars Lundgreen
FINLAND	Timonen	Tapani
FRANCE	Bastie	Jean
GERMANY	Sauter	Georg
HONG KONG	Lai	H. W.
HUNGARY	Dézsi	Gyula
INDIA	Bhattacharya	Basudev
ITALY	Rastello	Maria Luisa
JAPAN	Nishi	Morotake
NETHERLANDS	Bouman	Anton J.
NEW ZEALAND	Clare	John F.
NORWAY	Brekke	Björn
POLAND	Pietrzykowski	Jerzy
ROMANIA	Ionescu	Felicia
RUSSIA	Ignatyev	V G
SLOVAK REPUBLIC	Krempasky	Josef
SLOVENIA	Erste	Stanko
SOUTH AFRICA	Hengstberger	Franz
SPAIN	Corrons	Antonio
SWEDEN	Ottosson	Allan
SWITZERLAND	Blaser	Peter
THAILAND	Chanchanchop	Ujis
TURKEY	Öztürk	Leyla D.
UNITED KINGDOM	Goodman	Teresa M.
USA	Johnson	Norbert